STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 01-AFC-22
	)	
Application For Certification of the	)	COMMISSION STAFF'S
San Joaquin Valley Energy Center	)	POST HEARING BRIEF
	)	
	)	

The Energy Commission Staff ("Staff") offers the following as its Post Hearing Brief following the February 18 - 21 Evidentiary Hearings in this matter.

I. In all Areas Other than Staff's Condition Noise-6 and Certain Air Quality Conditions, Staff's Conclusions and Proposed Conditions are Uncontested and Should be Adopted by the Committee in its Proposed Decision.

During the February 21 hearing, the applicant and staff stipulated to certain changes in various conditions of approval. (February 21 Hearing Transcript, p. 202, ln. 20 – p. 206, ln. 9.) Those stipulations fully resolved the issues raised by the applicant in its pre-hearing filings except with regard to Conditions Noise-6, AQ-C3 and AQ-C7, which are discussed below in their specific topic areas. To the extent that Staff did not agree with a proposal from the applicant and the applicant did not agree with a staff counter-proposal, the applicant withdrew its request.

The text of the agreed upon revisions to the conditions is reflected in Exhibits 2O and 2P. (Due to a software error, the "Verification" paragraphs for several of the conditions were not labeled as such on those exhibits—the Verification label was missing. The Staff's exhibit book, transmitted to the parties previously, contains corrected versions of those exhibits that correctly identify the verification paragraph(s) for each of the amended conditions.)

At the hearings, staff agreed to the modification of Condition VIS-2 as provided in Exhibit Joint-1. We can now report, after post-hearing review, including conducting a revised plume modeling analysis, that the applicant's proposed changes to Condition VIS-7, reflected in Exhibit Joint-2 are also acceptable to staff.

Following the hearings, Noise staff gave further consideration to the applicant's proposed amendments to Conditions of Noise-4 and Noise-8 and now agrees to accept those amendments.

We understand that the applicant will reproduce the revised conditions in their amended forms as a part of its opening brief. Rather than create a second set, staff will review the applicant's document and highlight any discrepancies we find.

Staff requests that the Committee adopt staff's recommended conclusions, findings and conditions, modified as described above, for each of the uncontested topics.

II. Staff's Proposed Condition of Certification Noise-6 is Necessary and Supported by the Evidence.

A. The Project, as Proposed by the Applicant, would Result in a Significant Adverse Noise Impact that must be Mitigated.

The differences between the staff and applicant regarding noise are focused on proposed Condition of Certification Noise-6.[1] Behind those differences is a fundamental disagreement over what constitutes a significant noise impact under the California Environmental Quality Act (CEQA).

The same raw data from the noise survey undertaken by the applicant's noise consultants informs both opinions, but is used quite differently by each party. As the testimony has indicated, there are different metrics for measuring noise, all expressed in units of decibels. Those metrics are defined in Noise Appendix A of the Staff Assessment. (Ex. 2, Staff Assessment, p. 4.6-21.)

Staff testified that the L_{90} metric was the most appropriate metric for measuring the existing background noise levels. That metric best captures the sound that is always present and is best used to compare and contrast against the noise from a power plant, which is also constant. The L_{eq} metric, on the other hand, is an average of the energy levels of sound and tends to overstate the noise level when intermittent noise sources (i.e., traffic, trains) occur in a setting with a very low background noise level. (February 20 Hearing Transcript, p. 136 - 137.)

The steady state noise from a power plant will be most noticeable during the quietest times of the night, when the intermittent contributors to the background noise are at their lowest activity levels. During this time the power plant has the greatest potential to disturb people. Normally this quiet time occurs during the early morning hours after most of the populace has retired for the evening and before they resume their commuting activities in the morning. That is the case for the proposed San Joaquin Valley Energy Center facility.

Staff identified and averaged background noise levels for the four consecutive hours during the early morning in which the background levels were at their lowest. Staff then compared the predicted background noise levels with the expected noise from the power plant and found that the resulting increase in noise would be as much as 22 dBA at the sensitive receptors. The range of increases was from 5 dBA to 22 dBA. The 5 dBA increase occurred at a site in the City of San Joaquin, a suburban setting with higher background noise levels than the other receptors. The more rural sites in the unincorporated (County) area experienced increases of 10 to 22 dBA. (10 dBA represents a perceived doubling in sound levels and a 10-fold increase in the energy

[1] As we describe above, staff accepts the applicant's proposed amendments to Conditions Noise-4 and Noise-8.

level of sound; 20 dBA a quadrupling in level and a 100-fold energy increase.[2]) See Noise Table 4 of the Staff Assessment. (Exhibit 2, p. 4.6-9.)

Staff considers a 5 dBA increase in background levels to be worthy of further investigation and an increase of greater than 10 dBA to be a clearly "substantial" change and therefore significant under Appendix G of the CEQA Guidelines.[3] To avoid allowing a level of plant noise that would cause a significant impact, Staff recommends Noise Condition of Certification NOISE-6 to limit increases in noise levels at the sensitive receptors to no more than 10 dBA. The effect of the Condition is summarized in Noise Table 5 of the Staff Assessment. (Exhibit 2, p. 4.6-11.) Even so, this level will represent a doubling of the perceived background noise level at those very quiet locations.

B. The Applicant's Proposal to Limit Noise is Inadequate.

In contrast, the applicant has proposed to limit the noise of the power plant at the exterior of any existing residence to 49 dBA. That limit is 13 dBA greater than that proposed by staff for three of the sensitive receptors, 11 dBA greater than staff's proposal for another three sensitive receptors and 9 dBA greater than staff's proposal for another sensitive receptor. Staff recommends that the Commission allow a doubling of the background noise level, the applicant recommends a quadrupling.

As Mr. Buntin graphically demonstrated at the evidentiary hearing, if the applicant is allowed the noise limit it requests, the power plant will become the background noise. Its sound will mask the existing background noise and much of the noise from the intermittent noise sources that previously was heard over the background noise. The change will not be subtle. (February 20 Hearing Transcript, p. 131 - 140; Exhibits 2U, 2V.)

The applicant, while asserting there is no significant environmental impact to be concerned about, has nonetheless proposed a residence retrofit mitigation program for the sensitive receptors at issue. Staff questions the value of that program. Its stated goal is to achieve a 20 dBA noise attenuation from the residential structure, which the applicant admits is a level of performance that a home constructed in compliance with current building codes would achieve without modification. Further, staff does not believe that the residents' endorsements of that program were based upon a realistic picture of the noise levels to be expected. Rather, they understand, as their identical form letters tell us, "that the SJVEC will be built using extensive noise reduction technology." (Exhibits 4B.2 through 4B.8.)

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[2] February 20 Hearing Transcript, p. 136, lns 15-17.

[3] Appendix G of the CEQA Guidelines provides a checklist of questions that lead agencies normally consider in an initial study to determine whether to prepare an environmental impact report (EIR). (Cal. Code Regs., tit. 14, § 15000 et seq., App. G.) Even though Appendix G and EIR requirements do not apply to the Commission's certified regulatory program, staff often refers to Appendix G for guidance. Here, staff considered whether the project would result in a "substantial permanent increase in ambient noise levels in the project vicinity" or a "substantial temporary or periodic increase in ambient noise levels in the project vicinity" (Ibid.)

Mr. Baker testified that the level of noise-reducing features proposed for this project are nothing beyond the ordinary, and offered a table comparing the noise reduction features for various approved and proposed power plants. (February 20 Hearing Transcript p. 143 - 157, Exhibit 2N.) For example, the Inland Empire Energy Center, a very similar project proposed by this same applicant, proposes significantly greater noise reduction features. (See Exhibit 2N.)

Mr. Baker offered a table comparing the noise limits proposed by the staff and by the applicant with noise limits for various projects either presently before or previously approved by the Commission. (Exhibit 2M.) To account for the variations in the way the limits were expressed, he adjusted each of them to a common standard--dBA at 1,000 feet. While not the absolute noisiest, the level proposed by the applicant would be among the noisiest, not the quietest, standards.[4] (Ibid.)

C. The Applicant's Witnesses have Published Papers Consistent with Staff's Position.

The applicant's witnesses also ignored the teachings of the literature they cite in support of their testimony. Two substantively similar if not identical papers, prepared by Mr. Greene about a power plant noise reduction project he participated in, are provided as Exhibits 2S and 2T. Mr. Greene wrote:

> By using the power of twenty-twenty hindsight, two issues may be identified that probably received insufficient attention and which ultimately proved to be significant. The first issue has two factors: a) the existing, ambient noise levels were very low and the existing noise sources were generally intermittent in nature (this factor was known, having been revealed by the noise survey); b) the expectations (or tolerance) of the surrounding area's inhabitants regarding a novel, and at times continuous, noise source were unknown and were not determined prior to the plant coming on line. The second issue has to do with the potential effects of meteorological conditions on far field noise propagation.
>
> The confluence of these two issues resulted in a significant level of community dissatisfaction with power plant noise. While one noise-sensitive location experienced and was concerned about what would generally be considered a significant increase in noise level (3-16 dBA) under unfavorable wind conditions, the other more distant noise-sensitive residential area voiced its displeasure at increases resulting from unfavorable meteorological conditions of only 3-5 dBA above the very low ambient noise levels. Exhibit 2S, p. 2.

Mr. Greene concluded his paper by offering observations and recommendations, including:

[4] The applicant's reranking of the data in Mr. Baker's table, by sorting on the column showing the distance to the nearest sensitive receptor (Exh 4B.10), cannot hide the fundamental truth that this plant, if operated under applicant's proposed standard, would be one of the noisier plants.

> Communities with very low ambient noise levels may have acoustic expectations and tolerances that are different from those communities located in more typical urban noise environments. Pre-project community attitudinal surveys would be useful in these special environments.
>
> Because of the above, plus the degree of "novelty" of the new noise source, adjustments to standardized criterion noise levels for "acceptable" or "compatible" noise environments should be considered. Although routinely ignored by noise specialists and land use planners, adjusting criterion noise levels is not a new idea. For example, Table 1 in the State of California's *Guidelines for the Preparation and Content of the Noise Elements of the General Plan* suggests using "adjustment factors" of up to ±10 decibels to address existing outdoor ambient noise levels and a +5 to -10 decibel correction to account for a community's "Previous Exposure and Community Attitudes."

(Exhibit 2S, p. 9.) Mr. Greene appears to have ignored both his experience and the lessons of the above work. He made no effort to survey community attitudes. (February 20 Transcript, p. 52, ln. 24 – p. 53, ln. 4.) His testimony is based not on an assumption that nearby residents in this very quiet environment might be more sensitive to noise increases, but instead assumes they will be less sensitive to increases in background noise because the existing background noise level is so low.

When pressed to explain his apparent rejection of his own research, Mr. Greene offered that the "Fields" study (Exhibit 2X) convinced him that he was in error. The Fields study, however, made no reference to expectations of quiet in rural areas, but rather attempted to determine whether increases in ambient noise in a residential setting affected the sensitivity of receptors to intermittent noises such as traffic, trains and aircraft. It concluded that "neither field nor laboratory studies show that annoyance with longer-term exposures to multiple noise events is reduced in the presence of a second noise." (Exhibit 2X, p. 2255.) Here the issue is the significance of the steady-state noise from the power plant, not intermittent noise from traffic or the railroad; the Fields study is irrelevant and does not offer a credible explanation for Mr. Greene's failure to follow his own advice.[5]

A recent scholarly article by Paul D. Schomer ("On Normalizing DNL to Provide Better Correlation with Response," Exhibit 2H) confirms that the concept of adjusting noise limits to account for very quiet ambient noise environments is appropriate. Table 1 of that article suggests that the appropriate compensation for a "quiet suburban or rural community" is achieved by adding 10 decibels to the measured level of the intruding noise.

[5] Travelling further down that false path, however, Mr. Greene suggests that the power plant will serve as a white noise generator for the residents, saving them the time and expense of purchasing their own such device at the Sharper Image. February 20 Transcript, p. 26, lns. 6-12. He seems to view an increased background noise level as a community benefit.

If a 10 decibel adjustment factor were applied to the applicant's proposed noise limit, it would be reduced from 49 to to 39 dBA[6] at the nearest sensitive receptor, a result approaching the limits proposed by staff, which range from 36 to 47 dBA, depending on the location of the sensitive receptor.

D. Staff's Proposed Condition Noise-6 should be Adopted or the Record Reopened at the Applicant's Request to Assess the Infeasibility of Identified Mitigation Measures.

The applicant has suggested, in broad terms, that it would be infeasible to reduce the plant's noise to the levels required to comply with staff's proposed Condition NOISE-6. It has not offered sufficient evidence of that infeasibility, however. All it has done is list a series of measures, added up the cost and indicated that the total cost was too great. What is lacking is specific information about the "bang for the buck" – how much noise reduction benefit each measure would provide.

In effect the applicant is saying that no part of the package of measures can be implemented because the total package is too expensive. CEQA, however, does not treat mitigation as an "all or nothing" proposition. It requires that all feasible measures be applied to a project. (Pub. Resources Code §§ 21002, 21081; see also Cal. Code Regs., tit. 20, § 1755.) If, after the application of all feasible measures, the level of impact remains significant, the project can be approved if the Commission finds that further mitigation or alternatives identified in the proceeding are infeasible and decides to make findings of overriding consideration. (Cal. Code Regs., tit. 20, § 1755.).[7]

Here, it is likely that a combination of several of the measures listed by the applicant are feasible and will achieve some or most of the noise reduction that is required. The as yet unprovided information about the estimated noise reductions from each of the measures rejected by the applicant would inform that discussion. The present record also is lacking in substantial evidence justifying findings of the infeasibility of measures or alternatives identified and any overriding consideration. Staff would not object to reopening the Evidentiary Hearings to receive evidence regarding the infeasibility of identified measures and their estimated noise reductions and, if necessary, support for adoption of overriding considerations provided that a sufficient opportunity to review the proposed testimony in advance of the hearing is provided.

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[6] Because 10 decibels are added to the actual level of the intruding noise, the actual level must be limited to 39 dBA to ensure that the adjusted value does not exceed the proposed 49 dBA limit. Stated in regulatory terms as in Condition of Certification NOISE-6 is, the limit would be 39 dBA.

[7] Nor does exhaustion of all feasible mitigation measures define whether or not a significant impact exists. The two concepts are independent under CEQA.

III. The Emission Reduction Credits (ERC's) for the Project are Currently Insufficient and, therefore, Staff Does Not Recommend Approval until Certain Issues are Resolved by the Applicant and EPA.

A. The Project cannot Rely on an ERC that the Commission has Approved for another Project.

There is no dispute about the fundamental fact here. Emission Reduction Credit (ERC) Certificate No. S-1340-2 is currently described as being applied to both this project and the Pastoria Energy Facility (99-AFC-7). Compare Exhibit 2C at the table "SJVUAPCD ERC Allocation by Project," showing Certificate No. S-1340-2 as allocated to the SJVEC project, with Exhibit 2A at the table on the first of two pages numbered 105 showing the Certificate No. S-1340-2 as one of the ERCs for the Pastoria project. The same credit cannot be used for both projects. The dispute arises over what must be done to resolve this situation. The applicant appears to believe that it can unilaterally change the credits to be used for a project up to the time that the credits must be surrendered. Staff holds that the credits identified and approved during the certification process are the credits that must be surrendered, unless a change to that list is approved by the Commission.

The Warren-Alquist Act, at Public Resources Code subsection 25523(d)(2), provides:

> The commission may not find that the proposed facility conforms with applicable air quality standards pursuant to paragraph (1) unless the applicable air pollution control district or air quality management district certifies, prior to the licensing of the project by the commission, that complete emissions offsets for the proposed facility have been identified and will be obtained by the applicant within the time required by the district's rules . . . . The commission shall require as a condition of certification that the applicant obtain any required emission offsets within the time required by the applicable district rules, consistent with any applicable federal and state laws and regulations, and prior to the commencement of the operation of the proposed facility.

Prior to its recent amendment, this subsection required that offsets be both identified and obtained prior to licensing by the commission.[8] While no longer requiring that the offsets be obtained prior to Commission licensing, current law still requires that they be identified prior to that event. This is clear from the language of the statute. The air district must certify, prior to licensing by the Commission, that the offsets <u>have been</u>—not will be—identified. The use of the past-tense is clear and unambiguous; the identification must occur before Commission approval of the project.

[8] "The commission may not find that the proposed facility conforms with applicable air quality standards pursuant to paragraph (1) unless the applicable air pollution control district or air quality management district certifies that complete emissions offsets for the proposed facility have been identified and will be obtained by the applicant prior to the commission's licensing of the project, to the extent that the proposed facility requires emission offsets to comply with local, regional, state, or federal air quality standards."

B. If this Project is to be Approved, the Committee should Adopt Condition AQ-C7 to Prevent Switching ERC's from this Project to Another without Prior Commission Approval and Should Require the Applicant to Obtain such Approval for a Pastoria ERC for Use in this Case.

It is also the clear intent of Subsection 25523(d)(2) that the credits identified and approved during the licensing process be the same credits that are actually surrendered for the project. Here the applicant suggests that it be allowed to modify an approved offset package without any review by the Commission. That is clearly inappropriate. Condition AQ-C7 is designed to state this requirement explicitly to avoid a recurrence of this situation. It is a statement of existing law, however, and the requirement is no less applicable to the Pastoria project even though it lacks an explicit condition. In order to have complied with the law at the time of its approval, the Pastoria project must have identified and obtained its emission offsets. It apparently did so since the decision, as noted above, describes Certificate No. S-1340-2 as part of its offset package. The identified offset package thus became a condition of approving the Pastoria project.

Mr. Warner of the San Joaquin Valley air district testified at the evidentiary hearing that his agency had just begun to impose a condition similar to AQ-C7 on projects and, had this project come before them on the day of his testimony, such a condition would have been applied to it. February 19 Hearing Transcript, p. 333 - 335. The United States Environmental Protection Agency (EPA) stated a similar position in its recent proposed approval of the District's revised New Source Review rules.

> [T]he new or modified source must identify the source of the emissions reduction to be used to meet the offset requirements, must provide an opportunity for review of the proposed emission reduction credits and, once the ATC is issued, cannot change the emission reduction credits unless a new ATC is proposed identifying the new emission reduction credits to be relied upon.

(68 FR 7330, 7333.)[9] The applicant can solve the problem by updating the offset package that was approved for Pastoria. To satisfy the needs of both Pastoria and this project, the applicant must seek to remove Certificate No. S-1340-2 from its inventory of emission credits for Pastoria and show that sufficient credits remain in the inventory to satisfy the offset obligations for that project. Otherwise, Certificate No. S-1340-2 may not be properly applied to this project. Without Certificate No. S-1340-2, this project lacks sufficient offsets to meet its offset obligations under the district's rules. For that reason, staff cannot recommend approval of this project.

C. The Project Currently Lacks Sufficient Offsets to Mitigate Potentially Significant PM_{10} Impacts.

In order to mitigate the PM_{10} impacts of the project, Staff proposes to require offsets for the SO_2 emissions from the project. A portion of the SO_2 converts to PM_{10}, which is of great concern. The applicant objects, suggesting that they are providing sufficient

[9] Mr. Haber of EPA agreed that Condition AQ-C7 was appropriate, though his preference was that such a condition be imposed by the air district. February 19 Hearing Transcript, p. 146, lns. 9 - 22.

excess credits in their existing credit package.[10] February 19 Hearing Transcript, p. 36. Mr. Walters testified that the applicant's argument ignored that the power plant was expected to emit 400 tons of ammonia, another PM_{10} precursor, for which no mitigation or offsets were being required. He also described how the applicant could, without purchasing any additional offsets, amend the conditions of its Pastoria license to free up sufficient offsets to satisfy its SO_2 offset obligations for both Pastoria and this project and have 25 to 30 tons per year available for other projects or sale. That option was described in the Addendum to the Staff Assessment (Exhibit 2, Addendum, p. 4.1-56) nearly two months prior to the hearings.

Until adequate SO_2 offsets are identified, staff does not recommend approval of this project.

D. The Committee should Adopt Condition AQ-C3 to Mitigate Potentially Significant Construction Impacts.

Condition AQ-C3 has been proposed by staff to attempt to mitigate the potentially significant environmental impacts from dust and other emissions during the construction of the power plant. The parties stipulated that "the asthma rates in Fresno County are among the highest in the state." (February 19 Hearing Transcript, p. 199, lns. 18 - 20.) And Dr. Greenberg testified that a clear connection exists between the construction PM_{10} emissions, including diesel particulate, and asthma, both as a cause and an exacerbater.

> When you put that together then with this being a cause, and certainly an exacerbation, of asthma, and a high asthma rate in the state, and high particulate matter in the air in Fresno County and in San Joaquin County, that leads one then to the conclusion that there is a public health issue involved in generating large amounts of particulate matter, particularly over a 22- to 24-month construction phase.

(February 19 Hearing Transcript, p. 200, lns. 16 - 24.) The level of control recommended in Condition AQ-C3 for the diesel fueled construction equipment was proposed, in part, based on findings and recommendations by Dr. Greenberg. (Exhibit 2, Staff Assessment, p. 4.7-13.) The use of catalyzed diesel particulate filters were recommended by Dr. Greenberg to mitigate the health risks associated with the construction diesel equipment. Additionally, Dr. Greenberg's findings and amended waste management conditions were based on the existence of Condition AQ-C3. Dr. Greenberg's findings in both the public health and waste management issue areas may need to be revised if Condition AQ-C3 were eliminated or substantially revised.

The applicant argues that the catalyzed diesel particulate filter (soot filter) requirements in items p) and q) of Condition AQ-C3 could be construed as an attempt to preempt

[10] The excess credits are thought to exist because the air district requires offsets at a greater than 1 to 1 ratio, while the staff is recommending mitigation at a 1 to 1 ratio. For 100 tons of emissions a source must obtain 150 tons of offsets to satisfy the air district; the staff only recommends 100 tons to mitigate under CEQA, leaving 50 tons available to provide mitigation for other emissions for which the air district has not required offsets.

federal requirements for new and in-use non-road engines. Staff, in response to a similar assertion in the East Altamont case, reviewed the federal laws (42 U.S.C. §7543 and 40 CFR § 89.2) and talked to California Air Resources Board staff regarding the issue of preemption.

Staff believes that the federal sections generally pertain to setting standards that might affect the retail sale, titling or registration of motor vehicle or equipment in the area of interstate commerce – the appropriate purview of the federal government. However, staff's soot filter requirements are designed to mitigate the impacts of construction equipment at a specific site and do not exclude manufacturers or equipment from competing in the state. If the project owner can demonstrate that a soot filter would be unsuitable for an engine or piece of equipment, the soot filter requirement in staff's condition is waived. Exceptions include, but are not limited to, size, duty cycle, and state and federal laws.

Staff has held numerous discussions with CARB staff throughout the development of the soot filter requirements for power plant construction equipment. Staff has consistently acknowledged that the soot filter requirement should not, and could not, violate state or federal laws. Additionally, staff has always intended the soot filter requirement not cause equipment owners or construction personnel difficulty with soot filters. The significant air quality benefits that are available from the broad use of soot filters will only be realized if initial applications like those required by the staff are simple and successful. Regarding the current issue of preemption, based on recent discussions with CARB staff, we were advised that, with the broad and flexible language, the condition should avoid the preemption of federal law.

Given the information available, staff believes that AQ-SC-3 provides feasible mitigation of significant impacts from construction activities. Staff believes that the language in SC-3 provides the project owner adequate flexibility to ensure soot filters are only used on equipment and engines that would not cause the owner to violate state or federal laws, damage the engine or equipment, or nullify emissions warranties. Additionally, as new and improved engines that are also compatible with soot filters are deployed, these engines would also be required to use soot filters to realize additional emission reductions during construction.

E. The Committee Should not Recognize Pre-1990 ERC's until EPA's Approval is Final.

Until a few days before the Evidentiary Hearing, EPA held that a pre-1990 emission reduction credit proposed by the applicant could not be used to offset the emissions for the proposed project. EPA's opinion changed with the publication of its proposal to approve the San Joaquin air district's revised New Source Review rules on February 13, 2003. (68 FR 7330 – 7337.) Mr. Haber testified on behalf of EPA that the credit was now acceptable. Various unsettled aspects of EPA's proposed approval continue to concern staff, however.

EPA indicates that a pre-1990 ERC, in circumstances such as this where the emissions are not included in both rate of progress plan and attainment plan demonstration inventories, has a value of "zero." It is up to the San Joaquin Valley air district to provide other reductions from surplus credits to balance the amount of the credit at the time of its surrender. That balancing will be reflected in an annual accounting for the ERC tracking system by the District. The track record of the District in improving its air quality, however, does not inspire confidence that it will be successful in doing so.

At present, EPA's approval is not final. It is possible that it will never become final or will be significantly modified. The testimony of Mr. Warner of the San Joaquin Valley Unified Air Pollution Control District hinted that the District may not accept EPA's approach to the pre-1990 credits. This was recently confirmed in the District's comments filed with EPA. The District continues to assert, among other things, that the pre-1990 credits have intrinsic value and need not be entered into the tracking system with no value. This is not a hopeful sign that the District can or will cooperatively carry out the program that the EPA relies upon in its acceptance of the use of such credits in this case.[11]

In addition, the Center on Race, Poverty and the Environment commented to EPA that

> [I]t is pre-mature and irresponsible for EPA to approve the SJVUAPCD's new source review rules at this time. SJVUAPCD has not fulfilled its statutory requirements in the past. Because of this failure, the use of pre-1990 emission reduction credits is speculative, the tracking system is unproven, reliance on the SJVUAPCD is misplaced, and approval of the new source review rule will not insure equivalent or greater emission reductions than those required in 1990.

Copies of the District and CRPE comment letters are attached for the convenience of the Committee and the parties as Attachments A and B, respectively.

Staff cannot recommend the approval of this project with pre-1990 offsets unless the EPA rulemaking is adopted.

IV. CONCLUSION

The rural area to the south of the City of San Joaquin, into which the applicant proposes to introduce this power plant is presently a very quiet place. While some increase in background noise levels is acceptable, the increase proposed by the applicant, which would in some cases amount to a perceived quadrupling of the background noise level at a time of day when people are especially sensitive to noise, is clearly substantial and would be a significant environmental impact. The quiet must be protected to the extent feasible. To the extent that it is not feasible to hold the increases to 10 dBA or lower,

[11] A failure of implementation of the "solution" may leave the applicant open to citizen or EPA enforcement actions at some later time. February 19 Hearing Transcript, p. 140, lns. 20 - 24.

the applicant must produce substantial evidence to support a finding of infeasibility, as well as the adoption of a Statement of Overriding Considerations, a demonstration that has not been made to date. We are open to the presentation of additional evidence on the issues of feasibility and justification for an override.

Staff cannot recommend approval of this project until its Air Quality concerns are addressed. EPA's approval of the pre-1990 ERC's must be final, the double-counted credit removed from the Pastoria offset inventory, and sufficient offsets for SO_2 identified. Each of those concerns can be successfully addressed, but doing so, with the exception of EPA's approval, is within the control and responsibility of the applicant.

DATED: March 28, 2003

Respectfully submitted,

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PAUL A. KRAMER JR
Staff Counsel

Attachments:
A -- March 13, 2003 letter from Seyed Sadredin, Director of Permit Services, San Joaquin Valley Unified Air Pollution Control District commenting on EPA proposed rulemaking
B -- March 17, 2003 letter from Caroline Farrell, Center on Race, Poverty and the Environment commenting on EPA proposed rulemaking

March 13, 2003

Ed Pike
Permits Office [AIR-3], Air Division
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Comments on EPA's Proposed Rule (Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District [CA280-0390A; FRL-7450-9] February 13, 2003)

The District appreciates the opportunity to provide comments on EPA's proposed approval of the District's revised permit exemption and new source review (NSR) rules. We commend EPA and Region IX staff, in particular, for working with us to develop an equivalency approach to NSR that allows for local flexibility while ensuring compliance with all applicable federal requirements. However, we are extremely concerned that the background section of the proposed rulemaking contains serious factual errors and premature conclusions in relation to the pre-1990 emission reduction credits.

We believe that EPA's characterization of the pre-1990 credits will have a chilling effect on the entire emissions trading system in the San Joaquin Valley and other areas in California. As you know, a viable emissions trading program is essential for an active and effective permitting program. Taken at face value, EPA's approach to this matter, as articulated in the background section of the proposed rulemaking, introduces a high degree of uncertainty on the current and future validity of all credits. This uncertainty will discourage investment in development and procurement of new technologies that reduce air pollution, and will diminish the ability to recover costs already incurred for implementing innovative controls.

EPA's statement that "*The 1994 ozone plan included ROP milestone provisions for 1996 and 1999. The plan, however, did not include pre-1990 credits in the ROP provisions or attainment demonstration.*" is factually inaccurate. This statement overlooks the following actions by the District to account for the pre-1990 credits in the attainment and Rate of Progress (ROP) plans:

- In November of 1994, the District Governing Board adopted the District's "Ozone Attainment Demonstration Plan" and the "Revised 1993 Rate of Progress Plan". These documents were forwarded to EPA together through the California Air Resources Board. Page 1-4 of the ROP describes how the pre-1990 ERCs were incorporated in the Plan. Appendix F of the ROP lists every single pre-1990 ERC certificate and includes individual and aggregate amount of all pre-1990 ERCs.

  As explained in the Plan, the pre-1990 ERCs that were expected to be used were incorporated in the growth factor for the projected emissions in the ROP and the attainment demonstration. The 15% rate of progress was achieved without taking credit for the pre-1990 reductions. The attainment demonstration was based on the projected emissions inventory that utilized the growth factors that included the pre-1990 credits. Therefore, contrary to the background section in the proposed rulemaking, the 1994 ozone attainment plan and the ROP accounted for the pre-1990 emission reduction credits.

- On September 20, 1995, the District Governing Board adopted the District's "Revised Post-1996 Rate of Progress Plan which was subsequently forwarded to the EPA through the CARB. Again, on page 2-8, the document explains how pre-1990 ERCs are accounted for in the ROP and Appendix D of the document contains an explicit list of every single pre-1990 ERC. The same methodology, as described in the revised 1993 ROP, was used again. The 15% rate of progress was achieved without taking credit for the pre-1990 reductions.

All of the above documents were accepted by the EPA without questioning the methodology used to incorporate the pre-1990 ERCs. Not withstanding EPA's approval of the above referenced documents, EPA Region IX's permitting staff began questioning the validity of the use of pre-1990 ERCs alleging District's failure to account for the pre-1990 credits. A source of added confusion was that for a number of permitting actions, EPA staff approved the use of pre-1990 ERCs after they were pointed to the above referenced planning documents that contained an explicit listing of the ERCs being used.

Given the totality of the above circumstances, we cannot ascertain whether the problem lies in the possibility that the EPA has not seen the key portions of the above-referenced documents that address the pre-1990 ERCs or in the EPA's belief that the above referenced documents utilized an erroneous methodology to account for the pre-1990 ERCs. To date, we have not received any communication from

EPA that describes any shortcomings in the manner by which the pre-1990 credits have been accounted for in the above referenced documents. The background statement in the proposed rulemaking here does not acknowledge even an attempt by the above referenced documents to address the pre-1990 ERCs.

We recommend that the background section of the proposed rulemaking be revised with an acknowledgement that the above referenced documents did account for the use of pre-1990 credits and then outline the problems that the EPA has with the methodology used by the District, if any. We believe that the methodology used by the District to account for the pre-1990 credits is consistent with the Clean Air Act and EPA's policies on this matter. The pre-1990 credits have not been utilized towards the mandated 15% rate of progress and past attainment demonstration plans account for the use of pre-1990 ERCs as a component of projected growth.

The General Preamble (57 FR 13498) and the August 26, 1994 memorandum from John Seitz, EPA's Director of Office of Air Quality Planning and Standards, to David Howekamp of EPA Region IX, provide pointed guidance on how to account for the pre-1990 ERCs. First, the preamble states that the pre-1990 ERCs must be reflected as growth "*to the extent that the State expects that such credits will be used as offsets or netting prior to attainment of the ambient standards.*" The Seitz memorandum then lays out the specific methodology to account for the use of these credits. It provides two ways for inclusion of these ERCs as growth by stating that "*A state may choose to show that the magnitude of the pre-1990 ERCs (in absolute tonnage) was included in the growth factor, or the state may choose to show that it was not included in the growth factor, but in addition to anticipated general growth.*"

The District has chosen the first methodology prescribed in Seitz memorandum. The District has shown that the magnitude of pre-1990 ERCs that may be used is within the projected growth factor in the ROP. (Please see the *Revised 1993 ROP* and the *Revised Post 1996 ROP*). This is a simple concept because the pre-1990 ERCs can only be used for growth from sources subject to District regulations and not for any other purposes that impact the rate of progress or attainment efforts. In other words, the ERCs will only be used if there is a growth in expected emissions and an accurate growth factor will necessarily include the quantity of ERCs that are to be used.

In determining the magnitude of the pre-1990 ERCs that will be used, the District considered past permitting history and projected future permitting activity. The District assumed that all ERCs used to offset new and modified sources would come from pre-1990 ERCs. This is a conservative assumption since 50% or more of the ERCs available for use come from post-1990 credits. Even with this conservative assumption, the District's ROP demonstrated the required 15% rate of progress.

In the latest ROP adopted in December of 2002, the District made further adjustments to account for the previously unexpected growth from new power plants permitted during the state's energy crisis. The 15% rate of progress was still satisfied even after the contribution from the new power plants, and with the conservative assumption that all ERCs came from pre-1990 credits.

The 1994 attainment demonstration plan accounted for the use of pre-1990 ERCs consistent with the methodology cited in the above-referenced ROPs. The attainment demonstration was based on the projected emissions inventory which incorporated the growth factors that in turn included the pre-1990 ERCs. In other words, the quantity of future emissions that were input into the attainment demonstration model included the growth factor that incorporated the use of pre-1990 ERCs.

Finally, in recent correspondence and in the background section of the proposed rulemaking, EPA has raised the lack of an ozone attainment demonstration plan as a further obstacle to the use of pre-1990 credits. This is despite the fact that the EPA approved the use of pre-1990 credits for a number of projects in 2000 and 2001 after District's failure to attain ozone standards in November of 1999 under "serious" nonattainment designation.

We do not believe that the automatic moratorium which EPA has imposed on the use of pre-1990 credits, in absence of an approved attainment demonstration, is mandatory under the federal laws. Furthermore, we do not believe that the use of pre-1990 ERCs affects the attainment demonstration in our case.

The attainment demonstration is conducted by inputting the projected ozone precursors emissions into a photochemical model. The projected emissions inventory is based on the post-baseline growth factors for various source categories and any emissions reductions achieved through control measures implemented by the District, state, and federal government.

In our case, we have assumed that all ERCs used by the sources in accommodation of the expected growth comes from pre-1990 ERCs. In actuality, much of the growth may come from post-1990 ERCs. Since we have always made a conservative assumption that all ERCs used will be pre-1990, the attainment demonstration already accounts for the worst-case scenario. Whether the credits are actually pre- or post-1990, the emissions input to the photochemical model will not change. The only thing that impacts the attainment demonstration, in this case, is the amount of projected growth from new and modified stationary sources.

The District intends to submit an ozone attainment demonstration plan meeting federal requirements to EPA by the end of 2003. This plan will be developed through a public involvement process that includes public workshops and the opportunity to comment on the plan's development. How, and if, pre-1990 ERCs are included in the plan will be examined again through this process. If pre-1990 credits are used, the plan ultimately adopted by the District must account for the use of pre-1990 ERCs.

The General Preamble and the Seitz memorandum provide some guidance on this matter. First, the General Preamble after encouraging states to allow the use of pre-1990 ERCs, states the following:

> "*Existing EPA regulations (40 CFR 51.165(a)(3)(ii)(C)(1)) prohibits certain pre enactment emissions reduction credits, i.e., reductions achieved by shutting down existing sources or curtailing production or operating hours, from being used in the absence of an EPA-approved attainment plan.*" (57 FR 13553-4)

The General Preamble, therefore, poses a potential restriction on the use of pre-1990 ERCs only for certain types of credits (i.e., shutdown or curtailment related) and not all pre-1990 ERCs. Further, the Seitz memorandum, in interpreting the General Preamble, states that

> "*Consistent with General Preamble for the implementation of the Clean Air Act Amendments of 1990, States may allow pre-1990 credits to be used only if they: (1) are explicitly included and quantified as growth in projection year inventories required in ROP plans or attainment demonstrations that were based on 1990 actual inventories, and (2) are otherwise creditable.*"

This clearly provides for the use of pre-1990 ERCs if ROP plan accounts for use of these credits as growth. As stated earlier, the ROP plans submitted by the District account for the use of pre-1990 credits and continue to show the necessary 15% rate of progress.

In summary, we suggest that the background section of the proposed rulemaking be amended to reflect an accurate characterization of the District's handling to date, of the pre-1990 credits and clearly lay out any problems that EPA has with the methodology including suggested remedies. Based on our recent conversations with Mr. Paul Cort and Ms. Ann Lyons of EPA, it is our understanding that EPA will fully consider past submittals by the District and will meet with the District staff in the coming weeks in an attempt to reach a final determination on this matter.

We are encouraged by this renewed willingness by EPA to take a comprehensive look at this matter and look forward to working closely with EPA staff to reach an equitable solution in the near future. If you have any questions regarding this matter, please call me at (559) 230-5900.

Sincerely,

Seyed Sadredin
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March 17, 2003

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Re: U.S. EPA's proposed approval of the San Joaquin Valley Unified Air Pollution Control District's New Source Review rules, Rules 2020 and 2201, 68 FR

Dear Mr. Pike:

The Center on Race, Poverty and the Environment (CRPE) submits these comments on behalf of the Association of Irritate Residents (AIR), an unincorporated association of San Joaquin Valley residents. AIR is deeply troubled by the San Joaquin Valleys worsening air quality crisis. AIR urges the U.S. Environmental Protection Agency (EPA) to disapprove the San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) new source review rule, Rule 2201, especially as it allows the use of pre-1990 emission reduction credits. This rule will only allow polluting industries in the San Joaquin Air Basin to degrade air quality even further.

In this proposed rulemaking, EPA reverses its long-standing position that the use of pre-1990 emission reduction credits is impermissible.[1] Instead, EPA proposes to approve

[1]Mr. Matt Huber, Senior Energy Advisor for EPA Region IX, described EPA's pervious position at a California Energy Commission hearing on February 19, 2003. At that hearing, Mr. Huber stated that the SJVUAPCD's failure to account for the pre-1990 in any attainment demonstration plan or Rate of Progress Plan was a fatal flaw, not allowing the use of such credits. This was EPA's position on the Pastoria Energy Project and Sunrise Energy Projects in California's San Joaquin Valley. Transcripts at p. 138, 326. Now EPA's position is that pre-1990 emission

SJVUAPCD's new source review rule, which allows for the use of pre-1990 emission reduction credits, because SJVUAPCD has incorporated a tracking system. This tracking system will compare offsets under federal and SJVUAPCD rules on an annual basis to ensure (1) the aggregate quantity of offsets required under SJVUAPCD rules and federal rules are "equivalent", and (2) the aggregate the quantity of creditable emission reduction credits are "equivalent". EPA tries to cure any potential defects in the rule by stating that pre-1990 emission reduction credits enter the tracking system as zero credit and cautions the SJVUAPCD and polluters to avoid using these pre-1990 credits.

EPA's approval of the SJVUAPCD's new source review rule is premature. There are several problems that remain unaddressed and could contribute to the worsening air pollution problem in the San Joaquin Valley Air Basin. These include: (1) the speculative nature of pre-1990 emission reduction credits; (2) potential adverse air quality impacts; (3) reliance on the SJVUAPCD reporting, (4) and violation of 42 U.S.C. § 7515.

1. Pre-1990 Emission Reduction Credits Should Not Be Used Because They Violate the Criteria for Emission Reduction Credits.

Emission Reduction Credits must be "'real, enforceable, quantifiable, surplus and permanent.'"[2] As EPA's proposed rule states pre-1990 emission reduction credits present special problems because of their age requiring more detailed documentation to ensure they meet the above mentioned criteria. The proposed rule also outlines an additional problem with pre-1990 emission reduction credits, whether the credits meet the surplus emission requirement. "Surplus", here, means that the credits are not double counted.[3] When the Clean Air Act was amended in 1990, all emission reduction targets were based on the 1990 baseline. Because emission reductions credits prior to 1990 were reflected in the 1990 baseline, they had to be added back into emission reduction planning.[4]

EPA provided several ways this could be done and provided guidance on how pre-1990 Emission Reduction Credits could be incorporated into Rate of Progress Plans and attainment demonstration plans. The San Joaquin Valley Unified Air Pollution Control District has never accounted for pre-1990 emission reduction credits in any planning document since 1990. On December 19, 2002, the SJVUAPCD approved a Rate of Progress Plan and submitted it to the California Air Resources Board, to date EPA has not yet reviewed the plan to determine if it properly accounts for pre-1990 emission reduction credits. The proposed rule itself indicates that the Rate of Progress Plan alone is not sufficient to determine if the pre-1990 credits are

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reduction credits can be used because the SJVUAPCD has modified its new source review rule to include a tracking system. See www.energy.ca.gov.

[2]Proposed Rule, 68 FR 7332 (February 13, 2003).

[3]There are very real concerns that the emission reduction credits are not actual or quantifiable, as well.

[4]68 Fed. Reg. 7333-7335 (Feb. 13, 2003).

consistent with the need for the Valley to attain the National Ambient Air Quality Standards (NAAQS) for ozone. To allow the use of pre-1990 emission reduction credits without verifying if they are surplus or not is irresponsible and unlawful.

2. Approval of this Rule's Tracking System May Cause Further Air Quality Control Problems for the Valley, Making NAAQS Attainment More Difficult.

EPA and the SJVUAPCD have tried to frame the tracking system and use of pre-1990 emission reduction credits as a mere accounting issue, with no impact on air quality.[1] But, as we have seen recently with Enron and WorldCom., accounting issues do have real world consequences. Under this proposed rule, the SJVUAPCD will institute a tracking system. On paper it will compare both offsets under the district rules and federal rules to ensure they are equivalent in the aggregate and the creditability of emission reductions under district and federal rules to ensure they are equivalent in the aggregate. Facilities in the San Joaquin Valley are allowed to use pre-1990 emission reduction credits, but they enter the tracking system with a value of zero. In order to guarantee that district rules are the equivalent in the aggregate to federal rules, sufficient credits must be in the tracking system to "offset" the pre-1990 emission reduction credits.

For example, the San Joaquin Energy Center, a proposed power plant in the San Joaquin Valley, plans to use pre-1990 emission reduction credits. All of the NOx emission reduction credits available for the project are pre-1990.[2] Of the emission reduction credits available to mitigate PM-10, 46% of those credits are pre-1990.[3] For VOC, three emission reduction credits are available, two of which, totalling 277,812 lbs. per year, are pre-1990. Mr. Matt Huber, Senior Energy Advisor at EPA Region IX, testified at the California Energy Commission hearing on the proposed power plant, that if the power plant used pre-1990 emission reduction credits to mitigate its NOx emissions, they would enter the tracking system as zero, but there would have to be 300 tons of "surplus" NOx emission credits within the trading system to make up any shortfall.[4]

If the 300 tons of surplus NOx emission credits are not available, the proposed rule attempts to deal with the any potential shortfall by requiring the SJVUAPCD to retire surplus credits or apply federal standards to all new permits until there is no shortfall. This shortfall will have a real impact on air quality. Emission reduction credits are used as mitigation for projects. If there is a shortfall in emission reduction credits between the district rules and the federal rules,

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[1]See Testimony of David Warner, Manager of Permit Services, San Joaquin Valley Air Pollution Control District at the California Energy Commission February 19, 2003 hearing on the San Joaquin Valley Energy Center at p. 330.

[2]Staff Assessment Addendum, December 24, 2002, Table 29.

[3]Id., Table 30.

[4]Testimony of Matt Huder, Senior Energy Advisory at EPA Region IX, February 19, 2003 on the San Joaquin Valley Energy Center at p. 139.

and there are not sufficient emission reduction credits generated either by retiring "surplus" emission reduction credits or in the permitting of new facilities, there will in essence be no mitigation on polluters using pre-1990 emission reduction credits in the Valley.

For example, assume the tracking system does not include 300 tons of surplus NOx emission credits to offset the use of the 300 tons of pre-1990 NOx emission credits the San Joaquin Valley Energy Center plans to use. Assume also the Air District only has 100 tons of surplus emission reduction credits. The Air District would have to use federal criteria on all new permits. But with a slower economy the SJVUAPCD might receive fewer permit applications. Without new permits, the shortfall would continue to exist. This means 200 tons of pollution would be in the air that should not otherwise be there. Generating additional emission reduction credits will be even more difficult if the SJVUAPCD decides to voluntarily go to an extreme designation because the offset ratios will increase, a decision that will not be made until 2005.[5]

This illustrates another problem with approving the rule at this time. The tracking system is unproven in the San Joaquin Valley. Tracking began in August of 2001. EPA has not reviewed the results. The existence of a shortfall or the availability of "surplus"emission reduction credits is not known as is the SJVUAPCD's ability to manage tracking system if it goes to extreme. EPA should not approve this rule or the tracking system until this information is known.

3. EPA Should Not Approve the New Source Review Rule Because it Relies on SJVUAPCD Reporting to Make the Rule Enforceable.

In July 2001 EPA disapproved the SJVUAPCD's new source review rule because it lacked a "mandatory, enforceable, and automatic remedy". EPA now proposes to accept SJVUAPCD's new source review because it purportedly includes " mandatory, enforceable and automatic" remedies once a shortfall is discovered i.e. retiring surplus emission reduction credits, or using federal criteria in calculating the quantity of offsets and creditability of offsets. The SJVUAPCD only discovers a shortfall after completing its annual report each August. The SJVUAPCD is not known for completing reports required by statutes or regulation. The proposed rule itself details SJVUAPCD's failure to meet statutory deadlines for over a decade[6]. The SJVUAPCD is considering whether or not to voluntarily move to an extreme designation to

[5]See Testimony of David Warner, Manager of Permit Services, San Joaquin Valley Air Pollution Control District at the California Energy Commission February 19, 2003 hearing on the San Joaquin Valley Energy Center at p.339.

[6]See 68 FR 7334-7335.

avoid providing an attainment demonstration plant until 2010. Any remedy that hinges on SJVUAPCD reporting is inadequate and EPA should disapprove this rule for the same reason it did so in July of 2001.

4. EPA'S APPROVAL OF THIS RULE WOULD VIOLATE THE CLEAN AIR ACT, 42 U.S.C.§ 7515.

The Clean Air Act's Savings Clause, 42, U.S.C. § 7515 states:

> No control requirement in effect, or required to be adopted by an order, settlement agreement, or plan in effect before November 15, 1990, in any area which is a nonattainment area for any air pollutant may be modified after November 15, 1990, in any manner unless the modification insures equivalent or greater emission reductions of such air pollutant.

Adopting this rule would allow pre-1990 emission reduction credits to be used without determining whether or not they were surplus. This would not have allowed prior to the 1990 Clean Air Act amendments and it does not provide a greater reduction of criteria pollutants. In addition, approving the rule without any proof that the tracking system works or that the San Joaquin Valley is able to comply with the reporting requirements will not lead to emission reductions. It will only create further uncertainty and complicate the planning to clean up the San Joaquin Air Basins' unhealthy air.

Conclusion

For the reasons stated above it is pre-mature and irresponsible for EPA to approve the SJVUAPCD's new source review rules at this time. SJVUAPCD has not fulfilled its statutory requirements in the past. Because of this failure, the use of pre-1990 emission reduction credits is speculative, the tracking system is unproven, reliance on the SJVUAPCD is misplaced, and approval of the new source review rule will not insure equivalent or greater emission reductions than those required in 1990. EPA must disapprove SJVUAPCD's new source review rule.

Sincerely,

Caroline Farrell
Attorney at Law